AMENDMENTS TO THE CLAIMS:

Please amend Claims 2 through 4, 12 through 14, and 19 as follows.

1. (Cancelled)

2. (Currently Amended) An aberration changing optical system for changing an aberration, said aberration changing optical system comprising:

an optical element having different refracting powers in two orthogonal directions or having a refracting power ~~only~~ in one direction of two orthogonal directions and no refracting power in the other of the two orthogonal directions, said optical element being rotatable about a rotational axis, which is an optical axis of said optical system, and being tiltable relative to the optical axis.

3. (Currently Amended) An aberration changing optical system according to Claim 2, ~~further comprising~~ wherein said aberration changing optical system comprises a plurality of said optical elements ~~each being rotatable and tiltable~~, and

wherein ~~said optical elements are selectively used to change the aberration~~ one of said plurality of optical elements is used selectively.

4. (Currently Amended) An aberration changing optical system according to Claim 2, ~~further comprising a second optical element having at least one of a cylindrical surface and a toric surface, said optical element being rotatable about the optical axis of said optical~~

~~system and tiltable relative to the optical axis, integrally with the first mentioned optical element, said second optical element further being tiltable in an opposite direction to the first-mentioned optical element~~ wherein said aberration changing optical system comprises a pair of said optical elements, and

wherein said pair of optical elements are made rotatable and tiltable integrally and further tiltable in mutually opposite directions.

5. (Previously Presented) An aberration changing optical system according to Claim 2, further comprising a parallel flat plate being rotatable about the optical axis of said optical system and tiltable relative to the optical axis, integrally with the optical element, said parallel flat plate further being tiltable in an opposite direction to said optical element.

6. (Previously Presented) An aberration changing optical system according to Claim 2, wherein said optical element is mainly composed of a transparent material of one of quartz and fluorite.

7. (Previously Presented) An aberration changing optical system according to Claim 2, wherein the or each surface of said optical element, having a refracting power, has a refractive power not greater than $3x10^{-7}mm^{-1}$.

8. (Previously Presented) A projection system, comprising:

a projection optical system; and

an aberration changing optical system as recited in Claim 2, for correcting aberration produced in said projection optical system.

9. (Previously Presented) A projection exposure apparatus, comprising:

an illumination system; and

a projection system for projecting a pattern of a mask onto a substrate in cooperation with said illumination system, said projection system including a projection optical system and an aberration changing optical system, as recited in Claim 2, for correcting aberration produced in said projection optical system.

10. (Original) A device manufacturing method, including a process for transferring a device pattern onto a wafer by use of a projection exposure apparatus as recited in Claim 9.

11. (Cancelled)

12. (Currently Amended) A projection system for projecting a ~~device~~ pattern of a mask onto a ~~wafer~~ substrate, said projection system comprising:

a projection optical system disposed between the ~~device pattern~~ mask and the wafer; and

an optical element for correcting aberration produced in said projection optical system, said optical element having different refracting powers in two orthogonal directions or having a refracting power ~~only~~ in one direction of two orthogonal directions and no refracting power in the other of the two orthogonal directions, and said optical element being disposed between the ~~device pattern~~ mask and the wafer and being inclined with respect to an optical axis.

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13. (Currently Amended) A projection system according to Claim 12, ~~further comprising~~ wherein said projection system comprises a plurality of said optical elements, ~~and each being rotatable and tiltable, wherein said optical elements are selectively used to change the aberration~~ and

wherein one of said plurality of optical elements is used selectively.

14. (Currently Amended) A projection system according to Claim 12, ~~further comprising a second optical element having at least one of a cylindrical surface and a toric surface, said second optical element being inclined with respect to the optical axis and in an opposite direction to the first-mentioned optical element~~ wherein said projection system comprise a pair of said optical elements, and

wherein said pair of optical elements are made rotatable and tiltable integrally and further tiltable in mutually opposite directions.

15. (Previously Presented) A projection system according to Claim 12, further comprising a parallel flat plate being inclined with respect to the optical axis and in an opposite direction to said optical element.

16. (Previously Presented) A projection system according to Claim 12, wherein said optical element is mainly composed of a transparent material of one of quartz and fluorite.

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17. (Previously Presented) A projection system according to Claim 12, wherein the or each surface of said optical element, having a refracting power, has a refractive power not greater than $3x10^{-7}mm^{-1}$.

18. (Cancelled)

19. (Currently Amended) A projection exposure apparatus, comprising:

an illumination system for illuminating a mask; and

a projection system as recited in Claim 12 for projecting a pattern of ~~a mask~~ the mask onto a substrate ~~in cooperation with said illumination system, said projection system~~

~~including a projection optical system and an optical system, as recited in Claim 12, for correcting aberration produced in said projection optical system~~.

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20. (Original) A device manufacturing method, including a process for transferring a device pattern onto a wafer by use of a projection exposure apparatus as recited in Claim 19.